

Special Notice SN08-36: Fracture Putty Proposer's Workshop, DATE: July 1, 2008;
REGISTRATION DEADLINE: June 14, 2008; TECHNICAL POC: Dr. Mitchell R. Zakin,
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DARPA is hosting a Proposer's Workshop that will provide critical information regarding the program vision, milestones, and opportunities associated with the development of an interdisciplinary team to respond to a potential DARPA program entitled "Fracture Putty."

Traumatic battlefield wounds such as compound bone fractures are very difficult to treat, often requiring multiple surgeries and long healing and rehabilitation times. Current treatments are deficient, can themselves lead to further complications, and are not fully load-bearing. The goal of the Fracture Putty program will be to develop a dynamic putty-like material which, when packed in/around a compound bone fracture, provides full load-bearing capabilities within days, creates an osteoconductive bone-like internal structure, and degrades over time to harmless resorbable by-products as normal bone regenerates. If successful, Fracture Putty could rapidly restore a patient to ambulatory function while normal healing ensues, with dramatically reduced rehabilitation time and the elimination of infection and secondary fractures. Specific technical challenges for the program include novel bioresorbable adhesives which bond preferentially to bone vs. soft tissues, with bone-like mechanical properties, in the wet biological environment; load-bearing biomaterials with high mechanical strength and high porosity that match the mechanical properties of bone; biomaterials which create hierarchical bone-like internal structure; and biomaterials which adapt to biochemical cues. Mathematical models for dynamically remodeling systems with complex stimuli will also be critical. Further program details and milestones will be available in a potential Broad Agency Announcement.

The Fracture Putty Proposer's Workshop will be held at the Executive Conference Center, 3601 Wilson Boulevard, Suite 600, Arlington, VA 22201, 7:30am - 4:30pm ET, July 1, 2008, and will consist of information, discussion, and networking sessions. In the information session overview presentations will be given by Government personnel to: (a) introduce the research community to the Fracture Putty program vision and goals; (b) explain the mechanics of a DARPA program and the milestones and metrics of this particular effort; and (c) encourage and promote teaming. This will be followed by an open discussion session to provide the opportunity for participants to interact with Government personnel and have their questions answered. A networking session following the discussion will facilitate interaction and team building among the Workshop participants. The latter part of the Workshop has been reserved for brief (15 minute) individual sidebar discussions with the Program Manager. Sidebars are crisp, high-information content presentations of specific program ideas and approaches. Detailed follow-up discussions will be held as needed. Further details are available on the registration website listed below.

Potential participants should note that formation of teams with sufficient expertise, facilities, and capabilities to address all of the Fracture Putty program's technical challenges will be crucial to its success. The multidisciplinary nature of this program will require diverse sets of skills and expertise to develop total solutions to the program objectives and achieve all of the program goals and milestones. DARPA will not be funding the development of component technologies that address only a subset of the program goals of the potential program. An important element of the Fracture Putty Proposer's Workshop is to facilitate the formation of teams with the necessary expertise to respond to a potential Broad Agency Announcement. Thus, participants are encouraged to prepare a brief 2-3 page summary describing capabilities and previous/potential research to facilitate communications, interactions, and

teaming discussions during the Workshop. In addition, an information and teaming website, <http://www.sainc.com/FPTeaming>, has been established to aid in the process.

Workshop details including registration, poster session, meeting location, and lodging information are given on the registration website at:
<http://www.eventmakeronline.com/dso/view/index.asp?meetingid=599>.

There is no fee for the Fracture Putty Proposer's Day Workshop. Registration is limited (maximum 100 people; 2 people per organization) by the venue capacity and early registration is highly recommended. The registration cutoff date is 4:00PM ET, June 14, 2008. Further administrative information is available from Ms. Robin Johnson (Robin.Johnson.ctr@darpa.mil). Additional technical information can be obtained from Dr. Mitchell Zakin (Mitchell.Zakin@darpa.mil). Please refer to the Fracture Putty Proposer's Day Workshop (SN 08-36) in all correspondence. This announcement is not a request for proposals; any so sent will be returned.

Point of Contact

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